

SIX FLAGS NEW ENGLAND	
SUBJECT: RIDE COMMISSIONING	SAFETY REFERENCE MANUAL
SECTION: 44	
EFFECTIVE: January 2016	SUPERSEDES: ALL PREVIOUS

1.0 PURPOSE

The purpose of this document is to provide general guidelines in a checklist format on how to verify the acceptability and integrity of any new, used, modified or overhauled ride that is introduced into the Six Flags system.

2.0 SCOPE

The information in this document will be used as a ride acceptance and commissioning guideline by Company officials (i.e. Corporate Engineering, Maintenance, Operations and Safety) involved in accepting newly purchased, modified or overhauled rides. Ride Vendors, Site Designers and Construction Contractors are also expected to comply with the guidance provided in this document. When commencing to accept or commission a ride, make a copy of this document to be used in the field. All completed documents will then be filed with Operations, Maintenance or Engineering.

3.0 GENERAL RIDE DATA

A manufacturer provided information plate, printed in English containing at a minimum the following information per ASTM Standards on Amusement Rides and Devices:

- ☐ Ride Manufacturer.....
- ☐ Ride Name.....
- ☐ Ride Serial Number.....
- ☐ Ride Model Number.....
- ☐ Date of Manufacture.....
- ☐ Vehicle or Unit Weight.....
- ☐ Power Requirements.....

Accepted & Commissioned by:

Vendor: _____ Name: _____ Date: _____

Park: _____ Name: _____ Date: _____

SIX FLAGS NEW ENGLAND	
SUBJECT: RIDE COMMISSIONING	SAFETY REFERENCE MANUAL
SECTION: 44	
EFFECTIVE: January 2016	SUPERSEDES: ALL PREVIOUS

4.0 RIDE OPERATIONS DATA

- ☐ Ride Type (Coaster, Aerial, Water Ride, Major Flat, Minor Flat, Animated / Motion Base, Kiddies Rides, Water Park Ride or Other).....
- ☐ Theoretical Hourly Ride Capacity (Manufacturer).....
- ☐ Actual Hourly Ride Capacity (Operational).....
- ☐ Load Time (Operational).....
- ☐ Unload Time (Operational).....
- ☐ Cycle Time (Operational).....
- ☐ Max. Speed.....
- ☐ Track Length.....
- ☐ Ride Height.....
- ☐ Number of Blocks or Zones.....
- ☐ Number of passengers or seats.....
- ☐ Number of Ride Units (Trains, Cars or Gondolas).....
- ☐ Restraint Type (Shoulder Harness, Lap bar or Seat Belt).....
- ☐ Height Restrictions.....
- ☐ Weight Restriction.....
- ☐ Age Restrictions.....
- ☐ Weather / Wind Restrictions.....

Accepted & Commissioned by:

Vendor: _____ Name: _____ Date: _____

Park: _____ Name: _____ Date: _____

5.0 **RIDE VENDOR DOCUMENT CHECKLIST** (Maintenance & Engineering) (All documentation must be in English)

- ☐ Master Document Index
- ☐ Check drawings for compliance to contract specifications
 - ☐ Control systems
 - ☐ Electrical
 - ☐ Mechanical
 - ☐ Structural
 - ☐ Civil
- ☐ Review exceptions to specifications, if any
- ☐ Operations procedures (must be unique – no generic ones)
- ☐ Maintenance procedures and manufactures documents
- ☐ PM Schedules
- ☐ Manufactures Acceptance & Commissioning procedures
- ☐ Spare parts list & inventory
- ☐ Emergency / Evacuation procedures
- ☐ All CAD and specific program files
- ☐ Ride Manufactures ASTM F24 Compliance Letter

SIX FLAGS NEW ENGLAND	
SUBJECT: RIDE COMMISSIONING	SAFETY REFERENCE MANUAL
SECTION: 44	
EFFECTIVE: January 2016	SUPERSEDES: ALL PREVIOUS

Accepted & Commissioned by:

Vendor: _____ Name: _____ Date: _____

Park: _____ Name: _____ Date: _____

6.0 SITE DESIGN CHECKLIST (Maintenance, Operations and Safety)

- ☐ Design Ride Queuing and Exit that meets ASTM Standards
 - ☐ Provide Operator & Emergency foot access around perimeter of entire q-line
 - ☐ Provide adequate trash can locations and drinking fountain consideration
 - ☐ Provide adequate shade and or weather protection
 - ☐ Provide overflow queue line options (Stanchions & Sockets)
 - ☐ Queue line entertainment (SFTV)
 - ☐ Pre-boarding and exiting automated spiels
 - ☐ CCTV for security control measures and/or boarding pass collection point
 - ☐ Exit waiting area, stroller and wheelchair parking
 - ☐ Informational signage throughout entrance queue, station or loading area and exit (i.e....wait times, ride info and ride closures)
 - ☐ Custodial needs (water connections, drainage, water resistant props, electrical outlets)
 - ☐ ADA Accessibility
 - ☐ Public Address System with zones (Track Area, Q-Line, Station & Boarding Area)
 - ☐ Queue line exit (chicken exit)
- ☐ Provide operator area(s), securing all control panels from guest access
- ☐ Station must have adequate drainage and cleaning friendly environment
- ☐ Operator access if possible to avoid track crossing
- ☐ Station must have emergency access and guest pre-boarding exit
- ☐ Ride station environmental control (heating / air conditioning, misters or fans)
- ☐ Design weather/sun protection for all operator positions
- ☐ Provide full visibility for operators (main & remote) and areas being controlled
- ☐ Consideration for security camera placement and observation from main control console
- ☐ Provide entrance turnstiles and/or other counters for throughput/cycle tracking
- ☐ Function lighting for console
- ☐ Lighting for themed, work and emergency situations
- ☐ Phones in-park extensions and p-lines (Operations/Maintenance to determine number and placement)
- ☐ Provide step lighting, anti skid surface and yellow/red highlighted edges where needed
- ☐ Evacuation lighting (lifts, catwalks and evacuation paths)
- ☐ Emergency lighting or power
- ☐ Evacuation life lines or fall protection
- ☐ Storage area for operator equipment (specify size and location)
- ☐ Specify walking surface composition and finish to meet non-slip standards ASTM
- ☐ Provide designated pathways within Ride Perimeters
- ☐ Fire detection and suppression as required by local codes

SIX FLAGS NEW ENGLAND	
SUBJECT: RIDE COMMISSIONING	SAFETY REFERENCE MANUAL
SECTION: 44	
EFFECTIVE: January 2016	SUPERSEDES: ALL PREVIOUS

- ☐ Clearly marked, and mounted fire extinguishers
- ☐ Clearly marked safety zones for hazardous areas (tracks, air gates, other fall areas)
- ☐ Loose article storage
- ☐ Positive latch entrance and exit gates
- ☐ Provide maintenance access to all ride controls and equipment
- ☐ Provide (where possible) clear path from all restart positions
- ☐ Provide access for fire and other emergency vehicles/equipment per local code
- ☐ Provide ground fault current interruption protection for all water effects
- ☐ Provide GFCI electrical outlet every 100' for maintenance use
- ☐ Provide for maintenance work/storage areas
- ☐ Provide climate controlled MCC
- ☐ Ensure compliance to following standards:
 - ☐ ASTM Standards on Amusements Rides & Devices
 - ☐ Ride Signage Policy
 - ☐ Restricted Area Fencing Policy
 - ☐ Queue Line Policy
 - ☐ Fall Protection Policy
 - ☐ Lighting Policy (Reference Electrical Engineering Specification, SP-EL-01, Section 3.0)
 - ☐ Lockout / Tag Out Policy
 - ☐ Single Operator Policy

Note: If a box was not checked please explain briefly to the right of the item. (i.e. N/A)

Accepted & Commissioned by:

Vendor: _____ **Name:** _____ **Date:** _____

Park: _____ **Name:** _____ **Date:** _____

SIX FLAGS NEW ENGLAND	
SUBJECT: RIDE COMMISSIONING	SAFETY REFERENCE MANUAL
SECTION: 44	
EFFECTIVE: January 2016	SUPERSEDES: ALL PREVIOUS

7.0 **SPECIFIC RIDE ELEMENTS CHECKLIST** (Maintenance/Construction & Operations)

7.1	Structural Checks:	OK	N/A	COMMENTS
	Cable, Clamps, Chain	<input type="checkbox"/>	<input type="checkbox"/>	_____
	Safety Key or Cotter Keys	<input type="checkbox"/>	<input type="checkbox"/>	_____
	Assembly Pins, Bolts & Nuts	<input type="checkbox"/>	<input type="checkbox"/>	_____
	Platforms, Catwalks, Decking & Handrails.....	<input type="checkbox"/>	<input type="checkbox"/>	_____
	Ramps, Stairways, Steps.....	<input type="checkbox"/>	<input type="checkbox"/>	_____
	Fencing, Gates, Locks, Latches & Hinges.....	<input type="checkbox"/>	<input type="checkbox"/>	_____
	Sharp or Protruding Objects	<input type="checkbox"/>	<input type="checkbox"/>	_____
	Blocking and Support Jacks	<input type="checkbox"/>	<input type="checkbox"/>	_____
	Welds, Frame and Structure	<input type="checkbox"/>	<input type="checkbox"/>	_____
	Sweeps, Mudsills	<input type="checkbox"/>	<input type="checkbox"/>	_____
	Scenery & Props.....	<input type="checkbox"/>	<input type="checkbox"/>	_____
	Welding procedures & certification	<input type="checkbox"/>	<input type="checkbox"/>	_____
	Torque (bolt tensioning) requirements	<input type="checkbox"/>	<input type="checkbox"/>	_____
	ASTM compliance	<input type="checkbox"/>	<input type="checkbox"/>	_____
	Anchor bolts, foundations and grout	<input type="checkbox"/>	<input type="checkbox"/>	_____
	Track gauge	<input type="checkbox"/>	<input type="checkbox"/>	_____
	Geotechnical standards satisfied	<input type="checkbox"/>	<input type="checkbox"/>	_____

Accepted & Commissioned by:

Vendor: _____ Name: _____ Date: _____

Park: _____ Name: _____ Date: _____

7.2	Seats or Vehicles:	OK	N/A	COMMENTS
	Padding – interior	<input type="checkbox"/>	<input type="checkbox"/>	_____
	Padded restraints (head & arm rests).....	<input type="checkbox"/>	<input type="checkbox"/>	_____
	Seatbelts & Buckles.....	<input type="checkbox"/>	<input type="checkbox"/>	_____
	Locks and Safety Pins	<input type="checkbox"/>	<input type="checkbox"/>	_____
	Seat Anchors or Spindles	<input type="checkbox"/>	<input type="checkbox"/>	_____
	Body, Fiberglass Condition	<input type="checkbox"/>	<input type="checkbox"/>	_____
	Inspection portals or access panels.....	<input type="checkbox"/>	<input type="checkbox"/>	_____
	Vehicle Sign – “Remain Seated”	<input type="checkbox"/>	<input type="checkbox"/>	_____
	Number all vehicle cars	<input type="checkbox"/>	<input type="checkbox"/>	_____
	Drainage for seats and cars	<input type="checkbox"/>	<input type="checkbox"/>	_____
	Clearly marked step edges on vehicles	<input type="checkbox"/>	<input type="checkbox"/>	_____
	Non-slip surface on car floors	<input type="checkbox"/>	<input type="checkbox"/>	_____

SIX FLAGS NEW ENGLAND	
SUBJECT: RIDE COMMISSIONING	SAFETY REFERENCE MANUAL
SECTION: 44	
EFFECTIVE: January 2016	SUPERSEDES: ALL PREVIOUS

Appropriate number of "Out of Service" signs ...	<input type="checkbox"/>	<input type="checkbox"/>	_____
Manual release tools for restraints	<input type="checkbox"/>	<input type="checkbox"/>	_____
Easily identifiable lap bar limits (max. & min.)...	<input type="checkbox"/>	<input type="checkbox"/>	_____
Overhead oil/grease drip protection (SLCs)	<input type="checkbox"/>	<input type="checkbox"/>	_____
Props or lighting packages.....	<input type="checkbox"/>	<input type="checkbox"/>	_____
Appropriate warning labels.....	<input type="checkbox"/>	<input type="checkbox"/>	_____

Accepted & Commissioned by:

Vendor: _____ Name: _____ Date: _____

Park: _____ Name: _____ Date: _____

7.3 Drive System:	OK	N/A	COMMENTS
Wire rope Drive Cables	<input type="checkbox"/>	<input type="checkbox"/>	_____
V-Belts and Chain Drive	<input type="checkbox"/>	<input type="checkbox"/>	_____
Hydraulic, Electric Motors	<input type="checkbox"/>	<input type="checkbox"/>	_____
Drive Wheels, Road Wheels	<input type="checkbox"/>	<input type="checkbox"/>	_____
Clutch	<input type="checkbox"/>	<input type="checkbox"/>	_____
Belt & Motor Guards	<input type="checkbox"/>	<input type="checkbox"/>	_____
Belts.....	<input type="checkbox"/>	<input type="checkbox"/>	_____
Brakes	<input type="checkbox"/>	<input type="checkbox"/>	_____
Lubricators.....	<input type="checkbox"/>	<input type="checkbox"/>	_____
Tension units (belt & chain).....	<input type="checkbox"/>	<input type="checkbox"/>	_____
Excess lube collection system.....	<input type="checkbox"/>	<input type="checkbox"/>	_____

Accepted & Commissioned by:

Vendor: _____ Name: _____ Date: _____

Park: _____ Name: _____ Date: _____

SIX FLAGS NEW ENGLAND	
SUBJECT: RIDE COMMISSIONING	SAFETY REFERENCE MANUAL
SECTION: 44	
EFFECTIVE: January 2016	SUPERSEDES: ALL PREVIOUS

7.4 Safety Equipment:

OK N/A COMMENTS

General Information & Safety Signs.....	<input type="checkbox"/>	<input type="checkbox"/>	_____
Emergency Equipment	<input type="checkbox"/>	<input type="checkbox"/>	_____
Fire Suppression Equipment	<input type="checkbox"/>	<input type="checkbox"/>	_____
Lockout/Tag Out Devices	<input type="checkbox"/>	<input type="checkbox"/>	_____
Fall Protection	<input type="checkbox"/>	<input type="checkbox"/>	_____
UPS, Generator or Battery Back Up.....	<input type="checkbox"/>	<input type="checkbox"/>	_____
Emergency lighting.....	<input type="checkbox"/>	<input type="checkbox"/>	_____
Life lines (lifts/catwalks).....	<input type="checkbox"/>	<input type="checkbox"/>	_____
Positive latch gates.....	<input type="checkbox"/>	<input type="checkbox"/>	_____
Queue gates.....	<input type="checkbox"/>	<input type="checkbox"/>	_____
Anti-rollback devices.....	<input type="checkbox"/>	<input type="checkbox"/>	_____
Braking system.....	<input type="checkbox"/>	<input type="checkbox"/>	_____

Accepted & Commissioned by:

Vendor: _____ Name: _____ Date: _____

Park: _____ Name: _____ Date: _____

7.5 Electrical:

OK N/A COMMENTS

NEC Compliance.....	<input type="checkbox"/>	<input type="checkbox"/>	_____
Ground Control Circuitry or GFCI.....	<input type="checkbox"/>	<input type="checkbox"/>	_____
Controls (dual processor or redundancy).....	<input type="checkbox"/>	<input type="checkbox"/>	_____
PC based ride systems.....	<input type="checkbox"/>	<input type="checkbox"/>	_____
Diagnostics.....	<input type="checkbox"/>	<input type="checkbox"/>	_____
PLC or Drive programs and CAD.....	<input type="checkbox"/>	<input type="checkbox"/>	_____
Climate controlled Motor Control Centers.....	<input type="checkbox"/>	<input type="checkbox"/>	_____
Peripheral Devices.....	<input type="checkbox"/>	<input type="checkbox"/>	_____
Electrical Boxes	<input type="checkbox"/>	<input type="checkbox"/>	_____
Lights	<input type="checkbox"/>	<input type="checkbox"/>	_____
Electrical Cable and Wiring	<input type="checkbox"/>	<input type="checkbox"/>	_____
UL approval of components	<input type="checkbox"/>	<input type="checkbox"/>	_____
UL approval of system	<input type="checkbox"/>	<input type="checkbox"/>	_____

Accepted & Commissioned by:

Vendor: _____ Name: _____ Date: _____

Park: _____ Name: _____ Date: _____

SIX FLAGS NEW ENGLAND	
SUBJECT: RIDE COMMISSIONING	SAFETY REFERENCE MANUAL
SECTION: 44	
EFFECTIVE: January 2016	SUPERSEDES: ALL PREVIOUS

7.6	Pneumatics:	OK	N/A	COMMENTS
	No leaks.....	<input type="checkbox"/>	<input type="checkbox"/>	_____
	Valves adjusted for proper pressures..... (Document operational settings)	<input type="checkbox"/>	<input type="checkbox"/>	_____
	Accumulators with check valves.....	<input type="checkbox"/>	<input type="checkbox"/>	_____
	Driers, filters & oil lubricators.....	<input type="checkbox"/>	<input type="checkbox"/>	_____
	Control boxes.....	<input type="checkbox"/>	<input type="checkbox"/>	_____

Accepted & Commissioned by:

Vendor: _____ **Name:** _____ **Date:** _____

Park: _____ **Name:** _____ **Date:** _____

7.7	Hydraulics:	OK	N/A	COMMENTS
	No leaks.....	<input type="checkbox"/>	<input type="checkbox"/>	_____
	Valves adjusted for proper pressures..... (Document operational settings)	<input type="checkbox"/>	<input type="checkbox"/>	_____
	Storage tanks.....	<input type="checkbox"/>	<input type="checkbox"/>	_____
	Coolers or heaters.....	<input type="checkbox"/>	<input type="checkbox"/>	_____
	Spill containment area & clean up equipment.....	<input type="checkbox"/>	<input type="checkbox"/>	_____

Accepted & Commissioned by:

Vendor: _____ **Name:** _____ **Date:** _____

Park: _____ **Name:** _____ **Date:** _____

7.8	Operation:	OK	N/A	COMMENTS
	Automatic Operation.....	<input type="checkbox"/>	<input type="checkbox"/>	_____
	Manual Operation.....	<input type="checkbox"/>	<input type="checkbox"/>	_____
	Transfer Operation.....	<input type="checkbox"/>	<input type="checkbox"/>	_____
	Braking Systems	<input type="checkbox"/>	<input type="checkbox"/>	_____
	Anti-rollback Devices	<input type="checkbox"/>	<input type="checkbox"/>	_____
	Routine Ride Stop.....	<input type="checkbox"/>	<input type="checkbox"/>	_____
	Emergency Stop	<input type="checkbox"/>	<input type="checkbox"/>	_____
	General Rider Restrictions	<input type="checkbox"/>	<input type="checkbox"/>	_____
	R.P.M. or Speed	<input type="checkbox"/>	<input type="checkbox"/>	_____
	Block systems (block reset test).....	<input type="checkbox"/>	<input type="checkbox"/>	_____
	Emergency operations.....	<input type="checkbox"/>	<input type="checkbox"/>	_____

SIX FLAGS NEW ENGLAND	
SUBJECT: RIDE COMMISSIONING	SAFETY REFERENCE MANUAL
SECTION: 44	
EFFECTIVE: January 2016	SUPERSEDES: ALL PREVIOUS

Audio or video systems ☐ ☐ _____
(PA, warning horns, cameras & monitors)

Accepted & Commissioned by:

Vendor: _____ **Name:** _____ **Date:** _____

Park: _____ **Name:** _____ **Date:** _____

SIX FLAGS NEW ENGLAND	
SUBJECT: RIDE COMMISSIONING	SAFETY REFERENCE MANUAL
SECTION: 44	
EFFECTIVE: January 2016	SUPERSEDES: ALL PREVIOUS

8.0 RIDE COMMISSIONING TESTS

Tests are to be directed by Ride Vendor, Engineering or Maintenance. Tests to be completed in accordance with Vendor's acceptance procedures. Engineering or Maintenance sign-off is required. Note that all applicable acceptance tests must be completed prior to opening after a major modification or overhaul in accordance with ASTM Standard 846 sec. 6 & 7.

8.1 Operator Controls Test

- ☐ All pushbuttons and indicating lights checked for correct operation:
 - ☐ Main Operations controls
 - ☐ Remote operators controls
 - ☐ Maintenance controls
 - ☐ Transfer table controls
- ☐ Verify audio and video communication systems
- ☐ Queue, entrance or exit gates
- ☐ Verify HMI ride status or message display systems
- ☐ Capacity check actual vs. theoretical
- ☐ Ensure completion of Operations SOP's
- ☐ Ensure completion of Maintenance BUP's

Accepted & Commissioned by:

Vendor: _____ Name: _____ Date: _____

Park: _____ Name: _____ Date: _____

SIX FLAGS NEW ENGLAND	
SUBJECT: RIDE COMMISSIONING	SAFETY REFERENCE MANUAL
SECTION: 44	
EFFECTIVE: January 2016	SUPERSEDES: ALL PREVIOUS

8.2 Clearance Envelope Test ☐ **Applicable** ☐ **Not Applicable**

- ☐ Vendor's clearance envelope drawing available (reference ASTM F1159-94 Section 6.3)
- ☐ Wooden or PVC envelope frame, with test sticks attached, was used for test
- ☐ Any structural interference with envelope frame during ride cycle to be noted and identified on the ride.
- ☐ If interferences noted, corrections made and tests were rerun until no interferences evident.
- ☐ Any new envelope clearance dimensions recorded.
- ☐ Photographs taken of all modifications indicating where any adjustments had been made.
- ☐ Vendor and engineering notification & approval required when envelope test fails or is modified.

Accepted & Commissioned by:

Vendor: _____ **Name:** _____ **Date:** _____

Park: _____ **Name:** _____ **Date:** _____

8.3 Emergency Stop & Routine Stop Test

- ☐ Main operator control panel
- ☐ Remote operator's panel
- ☐ Transfer control panel
- ☐ Service Brake operator's panel
- ☐ Safety Brake operator's panel
- ☐ PLC watchdog timers
- ☐ PLC shutdown relays
- ☐ Hardwire and software stops tested
- ☐ Miscellaneous E-Stop devices were recorded
- ☐ Power loss
- ☐ Verification of daily static E-Stop test

Accepted & Commissioned by:

Vendor: _____ **Name:** _____ **Date:** _____

Park: _____ **Name:** _____ **Date:** _____

SIX FLAGS NEW ENGLAND	
SUBJECT: RIDE COMMISSIONING	SAFETY REFERENCE MANUAL
SECTION: 44	
EFFECTIVE: January 2016	SUPERSEDES: ALL PREVIOUS

8.4 Load Test

- ☐ Test weights loaded in each seat as prescribed in Vendor's manual.
- ☐ Ride was cycled and its operation was observed for the number of test cycles specified by Vendor.
- ☐ Structural supports or frame observed for any unusual movement.
- ☐ Vehicles inspected after its run cycle for any abnormality.
- ☐ Cycle data (i.e. RPM) recorded and compared to manufacturer's specification. Any deviation noted. _____

Accepted & Commissioned by:

Vendor: _____ Name: _____ Date: _____

Park: _____ Name: _____ Date: _____

8.5 Lift Drive System Load Test: ☐ Applicable ☐ Not Applicable

- ☐ Test weights loaded in each seat as prescribed in Vendor's manual.
- ☐ Verify presence of chain retainer clips on chain trough.
- ☐ Verify chain or belt tension.
- ☐ Lift drive motor current for the following conditions recorded:
 - ☐ Unloaded, no train on the lift _____
 - ☐ Fully loaded at lift engagement _____
 - ☐ Fully loaded train running on lift _____
 - ☐ Fully loaded lift restart _____
- ☐ With train parked and secured on lift, the following were checked:
 - ☐ Chain dog engagement
 - ☐ Anti-rollback device engagement
- ☐ After completing test the entire lift checked for any damage or unusual wear.
- ☐ Inspect chain dogs and anti-rollback devices. .

Accepted & Commissioned by:

Vendor: _____ Name: _____ Date: _____

Park: _____ Name: _____ Date: _____

SIX FLAGS NEW ENGLAND	
SUBJECT: RIDE COMMISSIONING	SAFETY REFERENCE MANUAL
SECTION: 44	
EFFECTIVE: January 2016	SUPERSEDES: ALL PREVIOUS

8.6 Accelerometer Test: ☐ **Applicable** ☐ **Not Applicable**

- ☐ Testing in accordance with ASTM 2137-01.
- ☐ Test weights loaded in each seat as prescribed in Vendor's manual.
- ☐ Test equipment set up to record vertical, lateral, longitudinal acceleration, roll rate and speed. Device to be mounted at approximate heart line position.
- ☐ Vendor & engineering review required.

Accepted & Commissioned by:

Vendor: _____ **Name:** _____ **Date:** _____

Park: _____ **Name:** _____ **Date:** _____

8.7 Brake Efficiency Test ☐ **Applicable** ☐ **Not Applicable**

Note: Tests to be completed with one train or unit only.

- ☐ Test weights loaded in each seat, as prescribed in Vendor's manual.
- ☐ Station brake penetration distance recorded (dry condition) _____
- ☐ Station brake penetration distance recorded (wet condition) _____
- ☐ Block brake penetration distance recorded (dry condition). _____
- ☐ Block brake penetration distance recorded (wet condition). _____
- ☐ Safety brake penetration distance recorded (dry condition) _____
- ☐ Safety brake penetration distance recorded (wet condition) _____
- ☐ Service brake penetration distance recorded (dry condition) _____
- ☐ Service brake penetration distance recorded (wet condition) _____
- ☐ Transfer brake penetration distance recorded (dry condition) _____
- ☐ Transfer brake penetration distance recorded (wet condition) _____
- ☐ _____ brake penetration distance recorded (dry condition) _____
- ☐ _____ brake penetration distance recorded (wet condition) _____
- ☐ With one brake failed open, at least a 10% margin available in all block sections.
- ☐ Record all brake pressures high and low.

Accepted & Commissioned by:

Vendor: _____ **Name:** _____ **Date:** _____

Park: _____ **Name:** _____ **Date:** _____

SIX FLAGS NEW ENGLAND	
SUBJECT: RIDE COMMISSIONING	SAFETY REFERENCE MANUAL
SECTION: 44	
EFFECTIVE: January 2016	SUPERSEDES: ALL PREVIOUS

8.8 Block System Check ☐ Applicable ☐ Not Applicable

Note: Tests to be completed with one train or unit only.

- ☐ Test weights loaded in each seat as prescribed in Vendor's manual.
- ☐ With only one train on the track, block check simulated for each block and the train was confirmed to stop in the correct block.
- ☐ Block Check for multiple unit operation performed per Maintenance Department procedures.
- ☐ Braking system consisting of Brake #1 (Safety), Brake #2 (Trim or service), Brake #3 (Station) or description of any other system noted.
- ☐ Test function of manual or maintenance block reset.

Accepted & Commissioned by:

Vendor: _____ **Name:** _____ **Date:** _____

Park: _____ **Name:** _____ **Date:** _____

8.9 Ride Power Loss Test

- ☐ Test weights loaded in each seat as prescribed in Vendor's manual.
- ☐ A power loss simulated after the train was dispatched over the lift.
- ☐ The train was confirmed to come to a complete and safe stop at the first brake segment.
- ☐ All other brakes were confirmed to be in the closed position.
- ☐ The lift and all drive tire units were confirmed to have stopped.
- ☐ Upon re-energization, restart of the ride back to normal operation was confirmed.
- ☐ Ensure all PLC's and ride systems retained memory. (block info)
- ☐ Check operation of battery backup or UPS systems.

Accepted & Commissioned by:

Vendor: _____ **Name:** _____ **Date:** _____

Park: _____ **Name:** _____ **Date:** _____

SIX FLAGS NEW ENGLAND	
SUBJECT: RIDE COMMISSIONING	SAFETY REFERENCE MANUAL
SECTION: 44	
EFFECTIVE: January 2016	SUPERSEDES: ALL PREVIOUS

8.10 Air Loss Test: ☐ **Applicable** ☐ **Not Applicable**

- ☐ Test weights loaded in each seat as prescribed in Vendor's manual.
- ☐ After the train was dispatched over the lift, the loss of air was accomplished by turning off the air compressor and turning the main discharge main valve to the open position.
- ☐ Low air pressure alarm was confirmed at the main operator's panel.
- ☐ The train stopped in the first available brake section.
- ☐ Confirm that the train could not be moved until fault was reset and normal pressure condition was restored.
- ☐ Record system operating pressure.

Accepted & Commissioned by:

Vendor: _____ **Name:** _____ **Date:** _____

Park: _____ **Name:** _____ **Date:** _____

8.11 Hydraulic System Loss Test: ☐ **Applicable** ☐ **Not Applicable**

- ☐ Test weights loaded in each seat as prescribed in Vendor's manual.
- ☐ After cycling the ride, the hydraulic system was turned off. The ride was observed to stop in a safe manner.
- ☐ A ride error was generated at the main operator's panel.
- ☐ The ride could not be restarted until the hydraulic system was reactivated and the alarm reset.
- ☐ Record all operating pressures.

Accepted & Commissioned by:

Vendor: _____ **Name:** _____ **Date:** _____

Park: _____ **Name:** _____ **Date:** _____

SIX FLAGS NEW ENGLAND	
SUBJECT: RIDE COMMISSIONING	SAFETY REFERENCE MANUAL
SECTION: 44	
EFFECTIVE: January 2016	SUPERSEDES: ALL PREVIOUS

8.12 Diagnostic, Controls & PLC System Test:

- ☐ Verification of all system faults.
- ☐ Fault message system with accurate information and troubleshooting tips.
- ☐ Verify battery backup or UPS system.
- ☐ Hard and electronic copies of all programs and schematics.

Accepted & Commissioned by:

Vendor: _____ Name: _____ Date: _____

Park: _____ Name: _____ Date: _____

8.13 Evacuation

Acceptability of evacuation per Operations Department procedure was confirmed for:

- ☐ Lift(s)
- ☐ Block brake(s)
- ☐ Service brake (s)
- ☐ Safety brake (s)
- ☐ Transfer area
- ☐ Station area
- ☐ Miscellaneous areas (recorded)_____

Accepted & Commissioned by:

Vendor: _____ Name: _____ Date: _____

Park: _____ Name: _____ Date: _____

8.14 Additional Tests

Describe and record any additional tests or check performed.